

1. Educational programme (10/15 days)

The Institute also organises regular summer/winter schools for UG/PG students of agriculture and allied sciences on “Secondary Agriculture”. The topics covered in this educational programme is as follows:

Sl. No.	Course Topics
1.	Secondary agriculture and its role in rural agro-bio-economy and income augmentation
2.	Visit to Museum and a lecture on the history of the institute
3.	Lac cultivation: Forest based
4.	Lac Integrated agroforestry system for sustainable livelihoods of tribal farmers
5.	A brief idea of lac insect species, strains and life cycle
6.	Lac cultivation: Agriculture based
7.	Natural polymers: overview and industrial applications
8.	Valorisation of agri- biowaste for sustainable waste management
9.	Processing of natural resins and gums
10.	Plant propagation and its importance in developing rural enterprises
11.	Plant tissue culture: Methods and its application in plant propagation
12.	Agro by-products: new sources of starch, pectin, protein isolates and antioxidants
13.	The concept and human implication of good manufacturing practices for secondary agriculture and rural industrialization
14.	Waste-water use and its role in sustainable agriculture
15.	Secondary metabolites and their importance in Secondary Agriculture
16.	Diversified uses of important natural resins and gums
17.	The concept and human implication of good agriculture practices for secondary agriculture and rural industrialization
18.	<i>In vitro</i> production of high value compounds using biotechnological tools
19.	Characterization techniques of nutraceuticals and pharmaceuticals from bio resources.
20.	Production of useful Products through fermentation and other microbial processes
21.	Use of insects through different processes to produce useful products
22.	Nutraceuticals: The future of human health
23.	Quality control in the context of processes and products
24.	Therapeutic potential of natural plant compounds for human healthcare.
25.	Drying and dehydration of agro-produce using conventional and novel drying techniques
26.	HACCP for secondary agriculture and rural industrialization
27.	Visit to IRF for demonstration of production of important gums and resins
28.	Visit and interaction with progressive farmers and entrepreneurs
29.	Production and processing of important gums and resins
30.	Laboratory demonstration of processing of important gums and resins
31.	Use of sensors and AI techniques in the production of agri-bioresources
32.	Use of sensors and tools of artificial intelligence in the processing and quality control
33.	Development of rural entrepreneurship and linkages with tertiary processing enterprises based on lac
34.	Importance and types of packaging, storage and transport of various products to fulfil GAP, GMP and HACCP requirements.